



# UNITED STATES PATENT AND TRADEMARK OFFICE

SW  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,883	02/14/2002	Ian James Fitzgerald	4502-1002	6759
466	7590	01/20/2004	EXAMINER	
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			SWENSON, BRIAN L	
			ART UNIT	PAPER NUMBER
			3618	

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	<i>SN</i>
	10/073,883	FITZGERALD, IAN JAMES	
	Examiner Brian Swenson	Art Unit 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 10 November 2003.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-8 is/are pending in the application.  
 4a) Of the above claim(s) 5-8 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-4 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 14 February 2002 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
 a) The translation of the foreign language provisional application has been received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

### **DETAILED ACTION**

1. Applicant's election of Figure 2 in Paper No. 6 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). An action on the merits of claims 1-4 follows below.

#### ***Priority***

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in New Zealand on 15 February 2002. It is noted, however, that applicant has not filed a certified copy of the 50995 application as required by 35 U.S.C. 119(b).

#### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "7" has been used to designate both "the stub axle" and "the rotating hub" in Figure 1. The examiner suggests renumbering "the rotating hub" as element 8 for consistence with page 3, line 8 of the specification. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 3618

4. Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The second member (3) in the elected embodiment of Figure 2 is not capable of being secured to the first member so that it is rotatable relative to the first member (2) about an axis as claimed in claim 4. Claim 4 has been examined with the second member allowed to translate vertically relative to the first member, in accordance the description of Figure 2 found on page 4, lines 3-6.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear in line 3, claim 2 what "can move in a similar vertical position" is referring to. The examiner suggest –can move in a vertical position relative–.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,487,429 issued to Ruggles.

Ruggles in Figures 1-6 and respective portions of the specification teach of a steering and suspension system having a kingpin (28; Col. 2, line 56) capable of being fixed (the king pin is fixed within pod 18) relative to the vehicle chassis (10), and a shaft rotatable (39) about the kingpin axis that is capable of being attached to a steering system (52).

In regards to claims 2 and 3, as best understood Ruggles teaches of a component (38) capable of attachment to a wheel via a stub axle or other means (40), and also connectable to the rotatable shaft in such a manner that it can move in a vertical position (shock absorber 48; Col. 2, lines 6-8) relative to the kingpin axis, the stub axle being oriented substantially perpendicular to the longitudinal axis of the kingpin (Figure 2).

In regards to claim 4, as best understood Ruggles teaches of an independent steering-suspension system including a kingpin (28) capable of being fixed relative to a vehicle chassis (10), a first member (39) rotatable about the axis of the kingpin, a second member (38) capable of being secured to the first member so that it can translate relative to the first member and is also rotatable about the axis of the kingpin,

a stub axle (40) capable of being secured to the second member, a third member (46) rotatable about the axis of the kingpin, whereby in use the independent steering-suspension system substantially eliminates toe and bump-steer.

7. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,047,981 issued to Burrows.

Burrows in Figures 1-4 and respective portions of the specification teach of a steering and suspension system having a kingpin (21) capable of being fixed relative to the vehicle chassis (20), and a shaft rotatable (31) about the kingpin axis that is capable of being attached to a steering system (24).

In regards to claims 2 and 3, as best understood Burrows teaches of a component (321) capable of attachment to a wheel via a stub axle or other means (axle 221 is received within bore 322 of component 321), and also connectable to the rotatable shaft in such a manner that it can move in a vertical position (shock absorber 30; Col. 2, lines 6-8) relative to the kingpin axis, the stub axle being oriented substantially perpendicular to the longitudinal axis of the kingpin (Figure 4).

In regards to claim 4, as best understood Burrows teaches of an independent steering-suspension system including a kingpin (21) capable of being fixed relative to a vehicle chassis (20), a first member (31) rotatable about the axis of the kingpin, a second member (32) capable of being secured to the first member so that it can translate relative to the first member and is also rotatable about the axis of the kingpin, a stub axle (221) capable of being secured to the second member, a third member (40)

Art Unit: 3618

rotatable about the axis of the kingpin, whereby in use the independent steering-suspension system substantially eliminates toe and bump-steer.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,797,618 issued to Brokhole, U.S. Patent No. 4,648,623 issued to Cameron and U.S. Patent No. 3,630,303 issued to Froumajou teach of suspension systems with steering members.

U.S. Patent No. 5,372,377 issued to Lee teaches of steerable front wheel suspension.

U.S. Patent No. 6,357,770 issued to Carpiaux et al. teach of an in-wheel suspension system.

U.S. Patent No. 5,209,319 issued to Buell, U.S. Patent No. 4,180,280 issued to Doveri, U.S. Patent No. 6,152,472 issued to Woodside, U.S. Patent No. 6,485,043 issued to Ito et al. all teach of various steering and suspension systems for cycle style vehicles.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Swenson whose telephone number is (703) 305-8163. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Johnson can be reached on (703) 308-0885. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687.

Art Unit: 3618

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Brian Swenson  
Examiner  
Art Unit 3618

  
bls

  
BRIAN L. JOHNSON  
SUPERVISORY PATENT EXAMINER 12/04  
TECHNOLOGY CENTER 3600